Who Preflights the Carrier?

By LCdr. Chris Sund

Work-ups around an aircraft carrier offer many of the most exciting challenges any aviator ever will meet. The first work-up event is usually carrier qualification, or in most cases, requalification. It is a time when pilots young and old put on their game faces and apply an enormous amount of concentration to practice ball-flying skills and to look their best.

My trusty Hawkeye and I had finished requaling a few nuggets when it was time to get more fuel and take on a new pilot. I was the aircraft commander and sat in the copilot seat as our senior LSO finished waving. He was ready to take his turn behind the ship. We had had many flights together, including an entire work-up and cruise the previous year. When he jumped into the pilot seat, I breathed a big sigh of relief. I was ready to let down my guard a few notches, and let him take over the bulk of the flying. The refuel and taxi to cat 1 went smoothly. He likely would get his four passes, and we would be on deck and in the ready room with plenty of time for him to formulate his debrief excuses for paddles.

I thought about getting rest as we wiped out the controls and prepared for the acceleration. He saluted and off we went. As the shuttle hit the water brake, I heard a loud thumping directly behind my seat. The cockpit started to fill with what I thought was smoke. I couldn't believe this was happening to me—E-2s have a very bad

track record for surviving in-flight fires. Even though it was daylight and we were less than 1,000 yards from the boat, the situation was serious. The pilot immediately reacted and said, "Get your oxygen on, and I will start a downwind turn."

I quickly donned my mask, took the controls so he could strap on his mask, and told tower we had smoke in the cockpit. After a few moments, I knew it couldn't be smoke because, as I put my mask on, the vapor smelled more like the humid, outside air. I thought we had experienced some type of pressurization problem that caused the ambient air to condense. The pilot turned off the air conditioning and pressurization system, and, sure enough, it fixed the problem.

By this time, we were rolling around the 90, and the ship had cleared all the non-essential personnel from the flight deck. I called the ball, and the pilot made a nice pass right to the 3-wire.

As we cleared the landing area, I let go another sigh of relief. I was ready to be sidelined and to head to the de-briefing table. Although it took only moments from takeoff to recovery, I was ready to get out of the Hawkeye.

As we taxied back to the island, I was about to get my second major scare in as many minutes. I noticed the deck was relatively empty, and we had plenty of room to maneuver our aircraft to its tie-down spot.

As we took off our masks and discussed the problem, I heard another thump, and a huge cloud of what looked like white confetti came from the left prop. My pilot immediately "T-handled" the left engine and set the parking brake. I reacted by feathering the right propeller and securing the right engine. I heard the air boss yelling, "Shut 'em down. Shut 'em all down," as the engines stopped turning and the cockpit went quiet. The time compression of the moment caused me to think we had hit one of the postal clerks carrying a mailbag.

I had time to think, "Why are we getting that much mail on the first day of workups?" The white cloud was huge. What else could make all of that white confetti? I really thought we had killed somebody.

As we quickly left the aircraft, I saw the left prop had struck something, taking off about 18 inches of all four propeller blades. To my horror, I saw an open armored hatch under the left prop. The pilot and I looked at each other and then hustled off the roof. With our luck, if we didn't get below decks, surely lightning or some other form of divine intervention would strike us.

The SDO greeted us in the ready room and asked if we were OK. I said, "We're fine, but what about that little explosion on the roof we lit off, did anyone take any shrapnel damage?" It was a while before all the information was in, and we discovered what had happened. After reviewing the ILARTS tapes (which were trained on us for the previous emergency), we saw that, as the E-2 taxied over an apparently secure hatch, the prop wash sucked it open, and it struck the propeller. The hatch was undamaged while the prop was a loss. One of our troubleshooters did catch a small piece of propeller-spar shrapnel in the leg, but everyone else was unhurt.

A little-known fact about E-2s and C-2s is their specialized propellers are made almost entirely of fiberglass for this exact circumstance. Had we been equipped with a conventional metal or aluminum propeller, the damage would have been much worse, possibly fatal. The small bits of fiberglass found later were as far aft as the round-down. The hatch we struck was forward of the island, abeam elevator No.2.

I learned quite a bit that day. Getting comfortable flying with a familiar, seasoned pilot can lead you to let down your guard. Carrier operations leave no room for anything but a superheightened state of awareness. You must know the procedures stone-cold, whether aircraft specific, or, in this case, CV NATOPS. We quickly put the airplane where it needed to be. We told the air boss about our problem, and he limited the flight-deck personnel to the bare minimum. Preflights apply to everything, not just to your airplane. Take a hard look at your environment. If you see something that doesn't look right, fix it. That hatch probably never was secured since the ship pulled away from the pier that morning. If your maintainers open a hatch, be sure they dog it down.

Who preflights the carrier? Everyone. Our environment demands an all-hands approach to flight operations, from preflights to postflights. Take the time, and do it right.

LCdr. Sund flies with VAW-117.